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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,384	04/12/2004	Jin Kook Jung	8021-224 (SS-19575-US)	2837
22150 F. CHAU & AS	7590 06/25/2007 SSOCIATES, LLC		· EXAMINER	
130 WOODBURY ROAD	T.	SANDVIK, BENJAMIN P		
WOODBURY, NY 11797		ART UNIT	PAPER NUMBER	
·		·	2826	
			MAIL DATE	DELIVERY MODE
			06/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

1)⊠ Responsive to communication(s) filed on 09 April 2007. 2a)☐ This action is FINAL. 2b)⊠ This action is non-final. 3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)☑ Claim(s) 1-4 and 23 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5)☐ Claim(s) is/are allowed. 6)☑ Claim(s) 1-4 and 23 is/are rejected. 7)☐ Claim(s) is/are objected to. 8)☐ Claim(s) is/are objected to. 8)☐ Claim(s) is/are objected to. 9)☐ The specification is objected to by the Examiner. Application Papers 9)☐ The paraming(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)☐ All b)☐ Some * c)☐ None of: 1.☐ Certified copies of the priority documents have been received. 2.☐ Certified copies of the priority documents have been received in Application No 3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.		Application No.	Applicant(s)	<u> </u>
Ben P. Sandvik Ben Ben Sandvik Ben P. Sandvik Ben Ben		10/822,384	JUNG ET AL.	
- The MALING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extension of term may be available under the provisions of 3 CPR 1.198(s), he revent, however, may reply be linerly fleat If NO period for reply is specified above, the maintimum statutory period will apply and will opine SX (6) MONTHS from the mailing date of this communication. Fallure to reply which he set or existed period for reply the statute. cause the application to be mailing date of this communication. Fallure to reply which he set or existed period for reply the statute. Cause the application to set of the communication, even if simply fleed, may reduce any search parent from 48h00F0RE 93 U.S. £ 133. Are reply vectived by the Office listed than their hemmals after the mailing date of this communication, even if simply fleed, may reduce any search parent from the speciments. Set 27 CPR 1.704(5) Status 1) □ Responsive to communication(s) filed on 09 April 2007. 2a) □ This action is FINAL. 2b) ☑ This action is non-final. 3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☑ Claim(s) 1.4 and 23 Is/are pending in the application. 4a) Of the above claim(s) is/are allowed. (b) ☑ Claim(s) 1.4 and 23 Is/are rejected. 7) □ The drawing(s) filed on 1.5 Is/are: a) □ accepted or b) □ objected to by the Examiner. Application Papers 9) □ The drawing(s) filed on 1.5 Is/are: a) □ accepted or b) □ objected to by the Examiner. Application Papers (so the priority documents have been received in Application No. 1.2 □ Certified copies	Office Action Summary	Examiner	Art Unit	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - and SIX (9) MONTHS from the mailing date of this communication. - if No period to reply is specified above, he maximum statutory period will apply and will expire K(9) MONTHS from the mailing date of this communication. - Failure to rigor within the set of extended period for rigory will, by a statute, cause the application to become ARANCONED (30 U.S. 5, 13.3). - Failure to rigory within the set of extended period for rigory will, by a statute, cause the application to become ARANCONED (30 U.S. 5, 13.3). - Failure to rigory within the set of extended period for rigory will, by a statute, cause the application to become ARANCONED (30 U.S. 5, 13.3). - Failure to rigory within the set of extended period for rigory will, by a statute, cause the application to become ARANCONED (30 U.S. 5, 13.3). - Failure to rigory within the set of extended period for rigory will, by a statute, cause the application to become ARANCONED (30 U.S. 5, 13.3). - Failure to rigory within the set of extended period for rigory will, by a statute, cause the application to become ARANCONED (30 U.S. 5, 13.3). - Failure to rigory within the set of extended period for rigory will, by a statute, cause the application to become ARANCONED (30 U.S. 5, 13.3). - Failure to rigory within the set of extended period of the communication, see if finely liked, may reduce any access to the communication. - Failure to rigory within the set of the statute the application of the maximum and the set of the communication. - Failure to rigory within the set of the set of the communication. - Failure to rigory within the set of the set of the set of the set of the communication. - Failure to rigory within the set of the se		Ben P. Sandvik	2826	•
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DETAILED ACTION

Response to Arguments

Applicant's arguments, filed 4/9/2007, with respect to the rejection(s) of claim(s) 1-4 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection are made in view of Wang, Kuroda, and Borst below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al (U.S. PG Pub #2002/0175419).

With respect to **claim 1**, Wang teaches a semiconductor substrate (Paragraph 5); dummy patterns for a chemical mechanical polishing (CMP) method formed in a uniform pattern over the semiconductor substrate (Fig. 11B, 700 and Paragraph 7); and marking patterns that are formed over the semiconductor substrate to correspond to predetermined groups of the dummy

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patterns (Fig. 11B, 900), wherein at least one dummy pattern is formed between two marking patterns.

With respect to **claim 3**, Wang teaches that the marking patterns (Fig. 11B, 900) have a different shape from the dummy patterns (Fig. 11B, 700).

With respect to **claim 4**, Wang teaches that the marking patterns (Fig. 11B, 900) are smaller that the dummy patterns (Fig. 11B, 700).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Kuroda et al (U.S. PG Pub #2002/0061608).

With respect to **claim 23**, Kuroda teaches a semiconductor substrate (Fig. 2, substrate 1); dummy patterns (Fig. 1, DP2) for a chemical mechanical polishing (CMP) method (Paragraph 4) formed in a uniform pattern over the semiconductor substrate; and marking patterns that are formed over the semiconductor substrate to correspond to predetermined groups of the dummy patterns (Fig. 1, DP1); wherein the marking patterns surround at least a group of dummy patterns.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang, in view of Borst et al (U.S. Patent #6693357).

With respect to **claim 2**, Wang does not teach that the marking patterns have a different shape from the dummy patterns. Borst teaches dummy structures formed over a semiconductor die comprising structures which have different structures (Fig. 5, 130). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide dummy structures on the device of Wang as taught by Borst in order to compensate for a gradual transition between overfilled and conformally filled wiring regions (Col 3 Ln 15-34).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben P. Sandvik whose telephone number is (571) 272-8446. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on 571-272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bps

EVAN PERT PRIMARY EXAMINER